



# Increasing Variability Across Play Routines for Young Girl with Autism

Jessica O’Neill, Lindsay Glugatch M.A., BCBA  
University of Oregon

## Introduction

- One of the defining characteristics of autism is repetitive and rigid behaviors (RRB).
- RRB can impede social learning and impact appropriate play.
- Having flexibility in play is important for young children with autism in order to increase positive social interactions in various settings.
- Past studies have shown that contingencies of reinforcement have been used to increase vocal variability for young children with autism (Esch 2009).
- This study implemented a lag 1 reinforcement schedule within play routines to increase flexibility in play.

## Research Questions

This study investigates whether there is a functional relation between a lag schedule of reinforcement and:

- (a) the number of number of switches in one play routine?
- (b) the number of different activities in a play routine?

## Methods

**Participant.** Ashley is a four year-old multi-racial girl diagnosed with autism. She speaks in one to two word utterances and has high social dramatic play skills.

**Design.** A multiple-baseline design across activities was used to assess the relation between a lag schedule of reinforcement and variability in play.

**Dependent Measures.** Number of different activities within the play routine and the number of switches to a different activity

**Procedure.** Three different play routine probes were collected twice a week. During baseline, the participant was reinforced for any activity done within the play routine. During intervention, the participant was only reinforced during her first type of activity or in the presence of a new activity. If the participant reattempted an activity she was just reinforced for, a new activity was prompted.

## Results

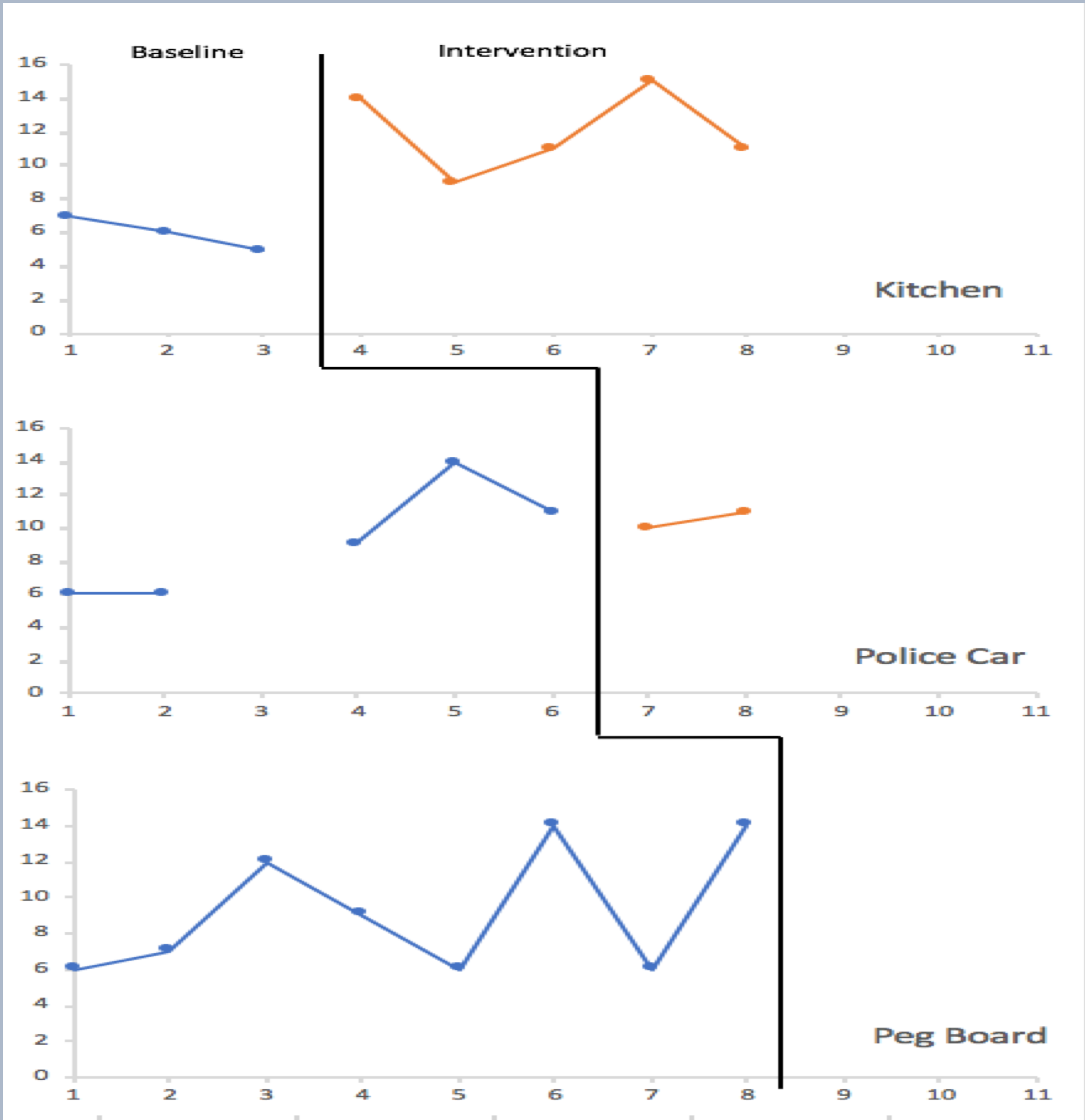


Figure 1. Number of switches to a different activity within each play routine

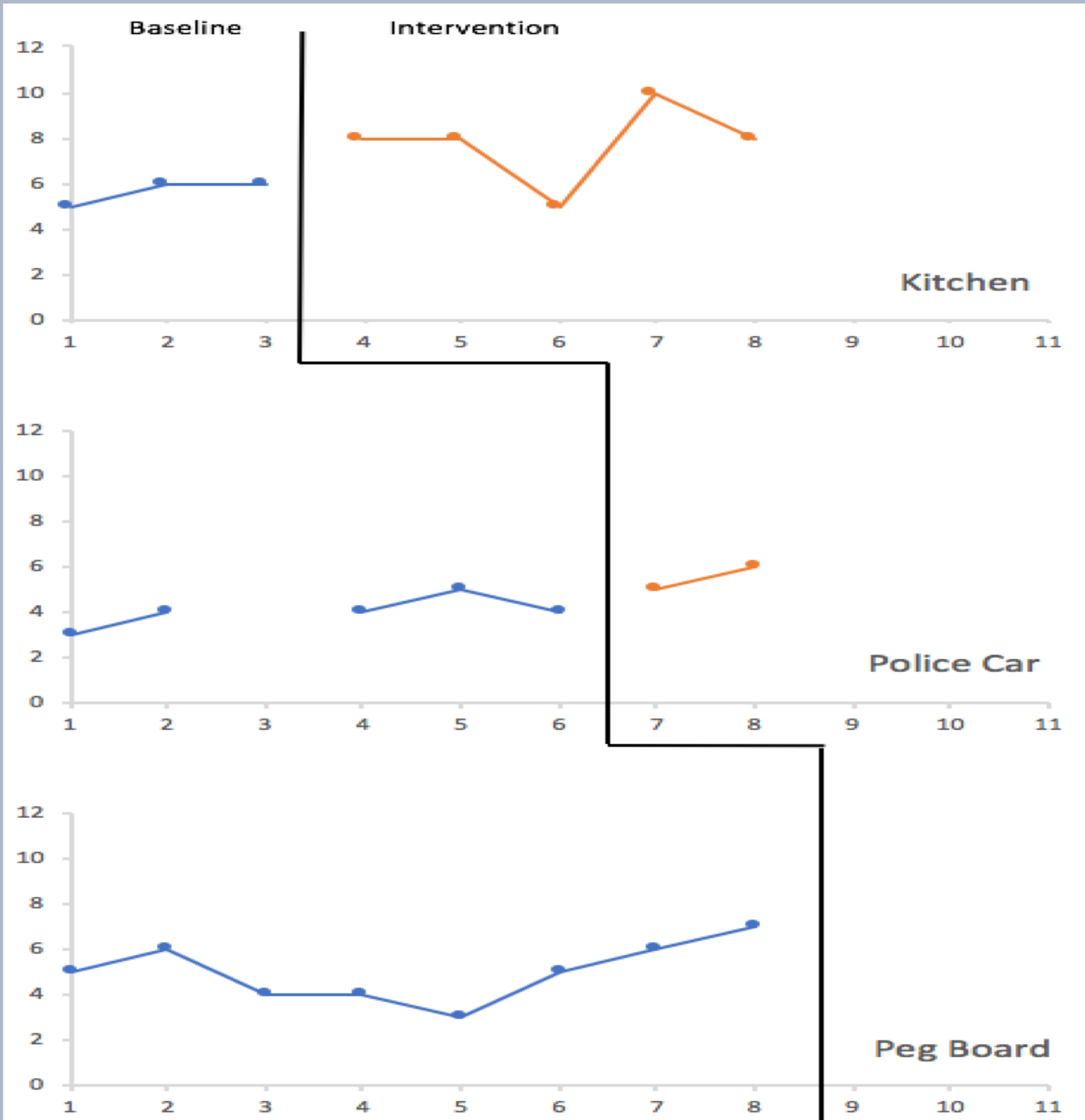


Figure 2. Number of activities within each play routine

Play Routine	Example of Activities
Kitchen	<ul style="list-style-type: none"><li>• Putting food on a plate</li><li>• Getting water from the sink</li><li>• Putting candles on a cake</li><li>• Cutting a cake</li></ul>
Police Car	<ul style="list-style-type: none"><li>• “Chase me”</li><li>• Hiding</li><li>• Pushing sound buttons</li><li>• ”Run away”</li></ul>
Peg Board	<ul style="list-style-type: none"><li>• Stacking tall</li><li>• Sword fighting</li><li>• Laying flat on peg board</li><li>• Using pegs as microphone</li></ul>

## Discussion

- The number of activities and number of switches to a different activity increases when a lag one schedule of reinforcement was used in the kitchen play routine.
- While the study is still in progress, it is anticipated that the police car and peg board play routines will increase with intervention as well.
- We can predict that a lag one schedule of reinforcement can be used to increase variability across play routines.

## Significance

- Decrease adherence to idiosyncratic routines
- Create positive social interactions
- Increase learning and social adaptation
- Increase flexibility in day-to-day routines